

SLCE: "REVERSE OSMOSIS", SEAWATER DESALINATION AND POTABILITY

Created in 1989, SLCE watermakers develops "reverse osmosis" water treatment units for seawater desalination and its treatment to make it potable. A leading-edge technique fitted with SOMEFLU corrosion-proof plastic pumps for their long service life.



Reverse osmosis is a physical technique used to desalinate seawater or to demineralise brackish water. The use of a semi-permeable membrane on the desalination units lets the water molecules (H20) pass and blocks the salts and organic compounds, thereby making the water that passes through it potable. Based in Lorient, this 6.7 M€ turnover company exports 80% of its production, with a complete line of single block units containing SOMEFLU pumps from the HMP, ECO and NP series. The units produced by SLCE cover fresh water requirements from 30l/hour to 1300 m3/day (up to 1500 m³/day for cruise ships). They are designed for use on all tonnages of ships, leisure, fishing, trade, civil and military, but also for use on offshore installations, military installations, in hotels, towns and industry. "We also work with oil rigs, comments Patrick Riot, Technical Director and then Managing Director of SLCE watermakers". Before adding: "in fact, we work on all sites where fresh water is needed and for which the only available resource is seawater."

Optimised maintenance

Proposed as standard or bespoke depending on the technical requirements of the site to be equipped, SLCE watermakers equipment is based on the use of high quality components. But also on strict production procedures and a global, dense and effective network of agents. The brand can thus guarantee its partners a very high level of quality, both in terms of equipment and service. In this demanding context, SLCE watermakers has chosen SOMEFLU corrosion-proof plastic pumps to load the pre-filtering part of the osmosis units: a seawater pressure of 3 to 4 bars makes it possible to pass through the sand filters, then the cartridge filters, before arriving at the high-pressure pumps, upstream of the osmosis membranes. The objectives? To provide reliable solutions proven over time. "The use of polypropylene (PP), a seawater resistant thermoplastic, for the pumps makes it possible to avoid the equipment corroding and prevents wear. That is not the case for marine bronze or stainless-steel pumps. SOMEFLU pump service life is incomparable with the other models", explains Patrick Riot. He concludes: "we tested them for the first time more than a dozen years ago on an installation in Bora-Bora where the 316L stainless steel versions only lasted a year. Since then, the maintenance comes down to changing a seal every 5 years."



